Appln. No.: 10/680,305 Responsive to 9/21/06 Office Action

Listing of Claims:

Please amend the claims as follows (this Listing of Claims replaces all previous claim sets):

Claims 1-18 (Canceled).

19. (Currently Amended) A method for smoothing a digital ink stroke, comprising the steps of:

receiving a user input that includes the digital ink stroke;

determining a width and a rotation of the digital ink stroke at a plurality of sampling locations;

for each of the plurality of sampling locations having a prior one of the sampling locations before the sampling location in the ink stroke and having a later one of the sampling locations after the sampling location in the ink stroke, determining a smoothed width at the sampling location as a combination of the determined width at the sampling location, the determined width at the prior sampling location, and the determined width at the later sampling location; and

for each of the plurality of sampling locations having the prior sampling location and the later sampling location, determining a smoothed rotation of the sampling location as a combination of the determined rotation of the sampling location, the determined rotation of the prior sampling location, and the determined rotation of the later sampling location; and

displaying a representation of the digital ink stroke having the smoothed widths and the smoothed rotations at the plurality of sampling locations.

20. (Previously Presented) The method of claim 19, wherein the step of determining includes determining a pen tip instance at each of the sampling locations, each pen tip instance having an associated size, the width at each sampling location depending upon the size of the respective pen tip instance.

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- 21. (Previously Presented) The method of claim 19, wherein the step of smoothing includes smoothing using a least-squares algorithm.
- 22. (Currently Amended) A method for smoothing a digital ink stroke, comprising the steps of:

receiving a user input that includes the digital ink stroke;

determining a plurality of pen tip instances of the digital ink stroke, each of the pen tip instances having an associated rotation; and

smoothing the rotations of the plurality of pen tip instances; and

<u>displaying a representation of the digital ink stroke including a representation of</u> the pen tip instances having the smoothed rotations.

- 23. (Original) The method of claim 22, wherein the step of smoothing includes smoothing using a least-squares algorithm.
- 24. (Previously Presented) The method of claim 19, wherein the step of determining includes determining each smoothed width in accordance with the following:

the smoothed width at the sampling location =

A1*(the determined width at the prior sampling location) +

A2*(the determined width at the sampling location) +

A3*(the determined width at the later sampling location),

wherein A1, A2, and A3 is each a constant.

25. (Previously Presented) The method of claim 19, wherein the steps of determining the smoothed width and the smoothed rotation include determining a fitting curve P that minimizes the following:

$$\sum \{a(C_i - P_i)^2 + b[W(C_i) - W(P_i)]^2 + c[R(C_i) - R(P_i)]^2\},\$$

wherein a, b, and c are constants, C_i are the sampling points, $W(C_i)$ are the determined widths for the sampling points, $R(C_i)$ are the determined rotations of the sampling

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points P_i are locations of points on the fitting curve P, $W(P_i)$ are widths for each point P_i , and $R(P_i)$ are rotations for each point P_i .

- 26. (Previously Presented) The method of claim 22, wherein the step of smoothing includes, for each of the plurality of pen tip instances having a prior one of the pen tip instances before the pen tip instance in the ink stroke and having a later one of the pen tip instances after the pen tip instance in the ink stroke, determining a smoothed rotation at the pen tip instance as a combination of the rotation of the pen tip instance, the rotation of the prior pen tip instance, and the rotation of the later pen tip instance.
- 27. (Previously Presented) The method of claim 22, wherein the step of smoothing includes, for each of the plurality of pen tip instances having a prior one of the pen tip instances before the pen tip instance in the ink stroke and having a later one of the pen tip instances after the pen tip instance in the ink stroke, determining a smoothed rotation at the pen tip instance as:

the smoothed rotation at the pen tip instance =

A1*(the rotation of the prior pen tip instance) +

A2*(the rotation of the pen tip instance) +

A3*(the rotation of the later pen tip instance),

wherein A1, A2, and A3 is each a constant.

28. (Previously Presented) The method of claim 22, wherein the step of smoothing includes determining a fitting curve P that minimizes the following:

$$\sum c[R(C_i) - R(P_i)]^2$$
,

wherein c is a constant, C_i are the pen tip instances, $R(C_i)$ are the rotations of the pen tip instances, P_i are locations of points on the fitting curve P, and $R(P_i)$ are rotations for each point P_i .